

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

ALLOC, INC.,

Plaintiff,

v.

Case No. 02-C-1266

UNILIN DÉCOR N.V. and UNILIN BEHEER B.V.,

Defendants/Counterclaimants.

v.

**BERRY FLOOR N.V., BERRY FINANCE N.V., and
ARMSTRONG WORLD INDUSTRIES, INC.,**

Counterclaim Defendants.

UNILIN DÉCOR N.V. and UNILIN BEHEER B.V.,

Plaintiffs,

v.

**Case No. 03- C-342
(Consolidated with
Case No. 02-C-1266)**

**VÄLINGE ALUMINUM AB, ALLOC, INC., and
BERRY FLOOR N.V.,**

Defendants.

UNILIN DÉCOR N.V. and UNILIN BEHEER B.V.,

Plaintiffs,

v.

**Case No. 04-C-121
(Consolidated with
Case No. 02-C-1266)**

**VÄLINGE ALUMINUM AB, ALLOC, INC.,
BERRY FLOOR N.V., and
ARMSTRONG WORLD INDUSTRIES, INC.,**

Defendants.

MARKMAN CLAIM CONSTRUCTION DECISION AND ORDER

This is a patent infringement action involving competitors in the flooring industry. Having conducted a claim construction hearing and considered the parties' written submissions and supporting documentation, the Court addresses various claim term disputes in two patents for floor panels with edge connectors held by Unilin Beheer BV as an assignee. The subject patents are United States Patent No. 6,006,486 patent ("‘486 patent") issued on December 28, 1999, and United States Patent No. 6,490,836 patent ("‘836 patent") issued on December 10, 2002.¹ The ‘836 patent is a continuation of the ‘486 patent.

Twenty disputed terms were presented to the Court for construction. The parties filed a joint appendix to their *Markman* opening, opposition and reply memoranda which includes the patents, the prosecution history, and dictionary definitions for some of the disputed claim terms. The Court begins with an overview of claim construction principles.

Principles Governing Claim Construction

Claim construction is question of law for the Court. *See Nystrom v. TREX Co.*, 424 F.3d 1136, 1141 (Fed. Cir. 2005). The Court's construction of the claims is guided by *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-25 (Fed. Cir. 2005), *cert. denied*, ___ U.S. ___, 126 S.Ct. 1332 (2006), which revisited the principles of claim construction and clarified prior case law regarding the use of dictionaries in claim construction. The Court's analysis begins with the claims of the patent. *Id.* at 1312. The words of the claims in a patent are to be given the ordinary and customary meaning that would have been attributed to them by a person of ordinary skill in the art at the time the invention was made. *Id.* at 1312-13. A person of

¹The “background of the invention” sections of the patent specifications state that the invention can be applied to other kinds of floor covering, consisting of hard floor panels.

ordinary skill in the art is deemed to have read the term in the context of the entire patent, including the claims themselves, the specification, and the prosecution history. *Id.* at 1313. The claims, specification, and prosecution history are referred to as intrinsic evidence.

Extrinsic evidence is everything “external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Id.* at 1317. Review of technical dictionaries and treatises can be helpful to the Court in understanding the technology of the invention and can assist the Court in determining the meaning of terms to those of skill in the art of the invention. *Id.* at 1318. Where extrinsic evidence conflicts with the intrinsic evidence of the patent, however, the intrinsic evidence controls. *Id.*

1. *Complementary Coupling Part*

The first term to be interpreted is “complementary coupling part.” The phrase appears in claims 1 through 3, 10, 23, 26 and 27 of the ‘836 patent. Unilin’s proposed construction is “a part that cooperates with another complementary coupling part to connect two panels together in the vertical and horizontal directions.” (Unilin’s Open. Br. 12.) Alloc’s proposed construction is “the parts by which the panels are connected cooperate with one another while the panels are connected.” (Jt. Claim Constr. Charts, ‘836 patent chart 1.)

A representative use of the “complementary coupling part” appears in claim 1 of the ‘836 patent as follows: “said side edges including **complementary coupling parts** configured to cooperate with identical cooperative **complementary coupling parts** of another one of said panel.” (‘836 patent, 13:62-64)² (emphasis added).

²The citation format used throughout this opinion for the patents is that the number preceding the colon denotes the column and the number(s) following the colon denote(s) the line(s).

In construing the phrase, the Court is to give the words the ordinary and customary meaning that would have been attributed to them by a person of ordinary skill in the art at the time the invention was made. *Phillips*, 415 F.3d at 1312-13. Such a person is deemed to have read the term in the context of the entire patent, including the claims themselves, the specification, and the prosecution history. *Id.* at 1313.

The specification discusses the coupling parts in the brief summary of the invention as follows:

To this aim, the invention relates to a floor covering, consisting of hard floor panels which, at least at the edges of the two opposite sides, are provided with **coupling parts**, cooperating with each other, substantially in the form of a tongue and a groove, wherein the **coupling parts** are provided with integrated mechanical locking elements which prevent the drifting apart of two coupled floor panels into a direction perpendicular to the related edges and parallel to the underside of the coupled floor panels.

(‘836 patent, 2:17-25) (emphasis added.)

The parties are in apparent agreement that “coupling” means some form of “connect.” However, neither definition suggested by the parties is entirely consistent with the principles of claim construction. Alloc’s proposed construction adds the limitation – while the panels are connected. The limitation is inconsistent with the language of the claim which states that such parts are “configured to cooperate” indicating that there is a passive element to the complementary nature of the part. Such limitation is contrary to the ‘836 specification

which states that the coupling parts also cooperate with each other while they are in the process of being coupled. (See ‘836 patent, 5:37-38.)

Unilin’s interpretation is consistent with the patent claims and specification but is circular because the definition uses the term – complementary coupling part – which it is intended to define. Complementary means “as forming or serving a complement: complete.” *Webster’s II, New Riverside University Dictionary*, 290 (Riverside Publishing Co. 1984). “Part” means “component.” *Id.* at 856. Thus, the Court interprets “complementary coupling part” as meaning “a completing component that cooperates with another completing component to connect two panels together in the vertical and horizontal directions.”

2. Tongue

The second term to be interpreted is “tongue” in the ‘486 patent, independent claims 1 and 65, and dependent claims 5, 10, 38 through 39, 42, 50, 53 (which depend on claim 1); and in the ‘836 patent, independent claims 1 through 3, claim 10, claim 23, and claims 26 and 27, and dependent claims 4 through 7, 11 and 12.

Unilin proposes that “tongue” be construed as “a protrusion extending distally from a side spaced inwardly from the top and bottom surfaces and including at least one locking element.” (Unilin’s Open. Br. 13.) Alloc initially proposed the construction “that portion of the male side of the panel that projects out beyond the top edge thereof, and the lower side thereof is the underside of the portion.” (Jt. Claim Constr. Charts, ‘486 chart 1.) But, Alloc’s subsequent submissions disclose that it apparently abandoned its initial proposed

construction³ and that, with the exception of the final clause “and including at least one locking element,” Alloc joins in Unilin’s proposed construction. (See Alloc’s Resp. Mem. 14.)

A representative use of “tongue” appears in claim 1 of the ‘836 patent as follows: “said coupling parts comprising substantially a **tongue** and a groove extending along panel side edges generally parallel to the panel underside and including integrated mechanical locking elements, said **tongue**, groove and locking elements formed in one piece with the panel, said **tongue**, groove and locking elements arranged to prevent drifting apart of the floor panel.” (‘836 patent, 13:64-67; 4:1-4) (emphasis added.)

The context of the surrounding words of the claim must be considered in determining the ordinary and customary meaning of those terms. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003). Unilin’s construction of “tongue” as “including at least one locking element,” does not fit when considered in the context of the claims. For example, claim 1 of the ‘836 patent, in which “tongue” appears, also includes the phrase “locking elements” three times. Similarly, claim 65 of the ‘486 patent, in which “tongue” appears, also includes “locking element” twice and “locking elements” twice.

The flaw in Unilin’s proposed definition is highlighted by consideration of a portion of claim 65 which reads: “said locking elements comprising a locking element in the form of a downwardly extending protrusion located on the lower side of the tongue and an upwardly facing cooperating locking recess in the lower lip.” (‘486 patent, 20:4-7.) If

³ To the extent such construction is not abandoned, Alloc’s construction limits the tongue to that part of the side edge “that projects out beyond the top edge.” Such construction would exclude the locking element 33 from being part of the tongue which is inconsistent with both the claim language and the specification. (See ‘486 patent Fig 22.) Therefore, Alloc’s initial construction of tongue is rejected.

Unilin's proposed definition of "tongue" is inserted in place of the word "tongue," as indicated by the bold italic type, the claim would read:

said locking elements comprising a locking element in the form of a downwardly extending protrusion located on the lower side of ***a protrusion extending distally from a side spaced inwardly from the top and bottom surfaces and including at least one locking element*** and an upwardly facing cooperating locking recess in the lower lip.

The inclusion of "at least one locking element" in the definition of "tongue" results in a duplicity of "locking element" and renders the term "tongue" nonsensical in the context of the claims. Therefore, the Court defines "tongue" as "a protrusion extending distally from a side spaced inwardly from the top and bottom surfaces."

3. Locking Element

The third term to be interpreted is "locking element," in the '486 patent, claims 1 and 2, 16, 19, 31, 51, 60, and 65 and in the '836 patent, claims 1 through 3, 6, 10, 13, 18, 20, 23, 26 through 28, and 30.

Unilin states that the term "locking element" should be defined as "a portion of a coupling part having the structure as recited in the claim that allows for engagement and locking." (Unilin's Open. Br. 15-16.) Alloc states the Court should apply the ordinary meaning of the terms to describe the various aspects of the locking elements, (Jt. Claim Constr. Charts, '486 chart 2), but does not suggest any definition.

Also, Alloc maintains that based on prosecution history, claims 1 and 65 of the '486 patent must be construed to require a connection such that when panels are joined

together, “the contact surfaces tend to urge the panels together at their upper edges.” (Alloc’s Initial Claim Construction Mem. (Corrected) (“Alloc Initial Mem.”) 9-12.) Additionally, Alloc asserts that the claimed panels must be construed as panels that are able “to be readily assembled and disassembled by alternate procedures involving lateral sliding [of] the panels together or rotating the panels relative to each other with the coupling parts partially engaged.” (*Id.* at 12.)

The Court’s analysis begins with the claims of the patent. *Phillips*, 415 F.3d at 1312. Claim 1 of the ‘486 patent states:

said coupling parts including **locking elements** formed integrally in one piece with said core, said **locking elements** including cooperative contact surfaces arranged to be engaged when adjacent identical ones of said panel are coupled together with their coupling parts cooperatively engaged to prevent substantial separation of two coupled identical ones of said floor panels at said upper side edges in a direction perpendicular to the edges of the panel sides and parallel to the undersides of the coupled floor panels; said locking means comprising a **locking element** in the form of a downwardly extending protrusion located on the lower side of the tongue and an upwardly facing cooperating locking recess in the lower lip, said locking recess being located at a position that is at least partially distally beyond a distal edge at which the upper lip terminates.

(‘486 patent, 14:3-19) (emphasis added.)

Claim 1 of the ‘836 patent uses “locking element” as follows:

said coupling parts comprising substantially a tongue and a groove extending along panel side edges generally parallel to the panel underside and

including integrated mechanical **locking elements**, said tongue, groove and **locking elements** formed in one piece with the panel, said tongue, groove and **locking elements** arranged to prevent drifting apart of the floor panel.

(‘836 patent, 13:64-67; 14:1-4) (emphasis added.)

The ‘486 patent specification discusses “locking elements” in the brief summary of the invention indicating that “the coupling parts are provided with integrated mechanical **locking elements** which prevent the drifting apart of two coupled floor panels into a direction perpendicular to the related edges and parallel to the underside of the coupled floor panels.”

(‘486 patent, 2:18:22.) The specification further explains that: “[b]y integrated mechanical **locking elements** [it] is understood that these form a fixed part of the floor panels, either by being connected in a fixed manner to the floor panels, or by being formed in one piece therewith.” (‘486 patent, 2:26-29.)

The range of the “locking element” is revealed in the specification which indicates that “a first important preferred form of embodiment, the coupling parts are provided with **locking elements** which, in the engaged position of two or more of such floor panels, exert a tension force upon each other which force the floor panels towards each other.” (‘486 patent, 2:30-34.) Alternatively, according to a second important preferred embodiment, the coupling parts and **locking elements** are formed in one piece with the core of the floor panels. (‘486 patent, 2:41-45.) In yet a third preferred embodiment (the characteristics of which may or may not be combined with the characteristics of the first and second preferred embodiments), “the floor covering is characterized in that the lower lip which limits or defines

the lower side of the groove, extends beyond the upper lip in the plane of the panel; the locking elements are formed at least of a contact portion which inwardly slopes downward; and that this portion, at least partially, is located in the portion of the lower lip which extends beyond the upper lip.” (‘486 patent, 3:8-17.)

The locking elements appear in the specification drawings and are further described in the detailed description. For example, figures 2 through 4 depict “the integrated mechanical locking parts or elements 6 which prevent the drifting or sliding apart of two coupled floor panels 1 in a direction D perpendicular to the respective sides 2-3 and parallel to the underside 7 of the coupled floor panels 1.” (‘486 patent, 5:29-33.)⁴ The detailed description further states that “in the represented example, the locking elements 9 consist of a first locking element 11, formed by a protrusion with a bent round shape at the lower side 12 of the tongue 9, and a second locking element 13, formed by a recess with a bent hollow or downwardly concave shape in the lower wall 14 of the groove 10.” (‘486 patent, 5:56-61.)

In discussing figures 4 through 7, the detailed description explains that “the locking elements 30 do not have to be of the same nature as the locking elements 6.” (‘486 patent, 6:41-43.) Rather, “the locking means 30 consist of a snap-together connection with locking elements 33 and 34 which grip behind each other.” (‘486 patent, 6:47-49.)

Again, a different form of “locking means” is depicted in figures 8 and 9 which show, contrary to the locking elements 33-34 which consist of rather local protrusions, in the forms of embodiment of figures 8 and 9 “use is made of locking elements 46-47 which, in

⁴Figures 1 through 11, 22, and 23 of the ‘486 patent are included in this decision at pages 63 through 67.

comparison to the total width B of the coupling, extend over a rather large distance.” (‘486 patent, 7:17-21.)

An additional variant is represented in figure 11 which shows “the locking element 6 is formed by an upward directed portion 53 at the tongue 9, which as a result of a turning movement of the panel, is brought behind a downward-directed portion 54 on the upper wall 18.” (‘486 patent, 7:61-64.)

The claims and the specification support the definition of “locking element” as being “a portion of a coupling part having the structure as recited in the claim that allows for engagement and locking.” However, a definition which does not use part of the term to be defined; namely, the word “locking,” is more helpful. Lock is defined as “fasten.” (See Jt. App. Ex. 4 (*Webster’s Ninth New Collegiate Dictionary* (9th ed. 1983) 701). “Element” is defined as “constituent part” or “component.” (*Id.* at 402.) “A portion” is similar to a “constituent part” or “component.” The Court construes “locking elements” meaning “a portion of a coupling part having the structure as recited in the claim that allows for engagement and fastening.”

In considering the additional limitations suggested by Alloc, the Court notes that “unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant art.” *Gemstar-TV Guide Int’l, Inc. v. Int’l Trade Comm’n*, 383 F.3d 1352, 1364 (Fed. Cir. 2004). The ordinary and customary meaning of a claim term may be determined by reviewing a variety of sources, which may include the claims themselves; dictionaries and treatises; and the written description, the

drawings, and the prosecution history. *Id.* The presumption of ordinary meaning will be “rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.” *Id.* (citation omitted).

Alloc relies upon a portion of the patent prosecution history for the application which matured into the ‘486 patent and continued as the ‘836 patent,⁵ as a basis for asserting that “locking elements” in claims 1 and 65 of the ‘486 patent must be construed to require a connection such that when panels are joined together, the contact surfaces tend to urge the panels together at their upper edges; and, 2) the claimed panels must be construed as panels that are able “to be readily assembled and disassembled by alternate procedures involving lateral sliding [of] the panels together or rotating the panels relative to each other with the coupling parts partially engaged.” (Alloc Initial Mem. 12.)

Unilin maintains that it did not state that it was necessary to urge the panels together to avoid visible gaps. (Unilin Opp’n 4.) Rather, Unilin stated that it was a necessary characteristic of floor panels to have the upper side edges of the panels meet without any visible gaps. (*Id.*) Unilin notes that the absence of visible gaps may be achieved without urging the panels together, comparing figure 7 of the ‘486 patent which shows no gap without any urging to figure 22 of the patent which shows urging.⁶ (*Id.*) Additionally, Unilin states that claims 19 through 21, which depend on claim 1, add the limitation of urging the panels

⁵“When multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.” *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

⁶Figures 7 and 22 of the ‘486 patent are included at pages 65 and 67 of this decision.

together, and claim 23 adds the limitation of the assembly and disassembly by alternate procedures involving lateral sliding of the panels together or rotating the panels relative to each other with the coupling parts partially engaged. (*Id.* at 5.)

Unilin also states that its reference to a highly desirable characteristic of the floor panels is not a clear and unmistakable statement of disavowal. (*Id.* at 4.) Furthermore, Unilin states that its explanation of a possible advantage of the composite wood product core which "may" yield is not a clear disavowal of claim scope. (*Id.* at 5.)

Tracing the relevant prosecution history discloses that the patent examiner initially disallowed application claims 1 through 6, 9 through 11, 12, 14, 16 through 19, 23 and 24 as being anticipated by British Patent #1 430 423 ("British patent"), which disclosed a floor covering panel consisting of adjacent rectangular/square panels each having opposite longitudinal sides that are provided with coupling parts that consist of a tongue and a groove and integrated locking parts. (Jt. App. Ex. C 210.) Application claims 7, 8, 15, and 22 were rejected for obviousness based on the British patent. (*Id.* at 211.)

In response, the applicants cancelled application claims 1 through 28 and submitted new application claims 29 through 94. (*Id.* at 216.) In the "remarks" section of the document, the applicant responded to the examiner's inquiries regarding the meaning of HDF (high density fiberboard) and MDF (medium density fiberboard), indicating that both were made up of the same materials – a composite of finely ground up wood particles and resin that have been compressed and cured to result in a rigid, structural panel material described in the

application. (*Id.* at 216.) The HDF had been compressed to a higher density than the MDF, to produce a harder and more rigid panel. (*Id.* at 217.)

The applicants argued that all of the new application claims were fully distinguishable from the British patent. (*Id.*) The applicants noted that the British patent disclosed a panel joint wherein the panel elements were made of plastic material and wherein the mutual line of intersection of the channel end groove extended vertically or perpendicularly with respect to the common plane including the panels. (*Id.*) The applicants stated, citing claim 29 as an example,⁷ “that a perpendicular relationship was not desirable because it require[d] the panels and the coupling parts to be manufactured with extreme precision to ensure that the surfaces of the laminated panels will meet each other at contiguous upper side edges without any visible gap, a necessary characteristic of flooring panels.” (*Id.* at 217-18.)

The applicants explained that because the panels of the claimed invention were made of a wood product with a composite core “it is **highly desirable** to remove the effects of minor variations or tolerances in machining the panels from adversely affecting the appearance of the panels when joined together.” (*Id.* at 218) (emphasis added.) Accordingly, explained the applicants, “the contact surfaces meet each other along a line or plane shown at L in the drawings which is inclined relative to the underside of the panels so that the contact surfaces tend to urge the panels together at their upper edges despite minor dimensional differences between the coupling parts of that panels that may arise during manufacturing

⁷Application claim 29 is claim 1 of the ‘486 patent. (Alloc Resp. Mem. 5.)

process or that may result from atmospheric conditions that exist at the time the panels are assembled.” (*Id.*)

The applicants further stated that the remaining claims were fully patentable, explaining that, while the composite wood product core was relatively rigid when inspected by the causal observer, during coupling of floor panels, “the tongue or the lip **may** yield slightly when they are coupled together.” (*Id.*) The applicant stated that “this slight yielding, typically of the lower lip, enables the panels to be readily assembled and disassembled by alternate procedures involving lateral sliding of the panels together or rotating the panels relative to each other with the coupling parts partially engaged.” (*Id.*)

Having carefully considered the portions of the prosecution history upon which Alloc relies, this Court concludes that such history does not limit Unilin’s invention as Alloc asserts. In the first instance, Unilin was indicating that its invention was distinguishable from the British prior art because unlike the British invention, perpendicular joinder was not desirable, because the panels meet at an inclined underside which tended to urge the panels together to achieve the contiguous upper surface. Unilin’s statement is not tantamount to a “manifest exclusion or restriction” that the panels must tend to urge the panels together at their upper edges. Similarly, Unilin’s statement that its panels “may” yield during assembly allowing for assembly and disassembly by alternate procedures involving lateral sliding of the panels together or rotating the panels relative to each other with the coupling parts partially engaged is insufficient to constitute a clear restriction on the claim scope. Unilin did not limit

claims 1 and 65 in the manner suggest by Alloc. *See NTP, Inc., v. Research in Motion, Ltd.*, 418 F.3d 1282, 1308-09 (Fed. Cir. 2005).

The Court’s conclusion is supported by the doctrine of claim differentiation which “creates a presumption that each claim in a patent has a different scope.” *Free Motion Fitness, Inc. v. Cybex Int’l, Inc.*, 423 F.3d 1343, 1352 (Fed. Cir. 2005) (internal quotation marks omitted). The doctrine provides a limited tool for claim construction, giving force to the presumption only as long as the resulting construction does not conflict with a clear meaning provided by the specification. *See Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380-81 (Fed. Cir. 2006). The claim differentiation “tool” works best in the relationship between independent and dependent claims. *Id.* at 1380.

Under the claim differentiation doctrine, when dependent claims are limited to a particular meaning or scope, the independent claim is presumed to have a broader meaning and scope. *Free Motion*, 423 F.3d at 1351. Stated somewhat differently, under such doctrine, where a limitation sought to be read into an independent claim already appears in a dependent claim, there is a presumption that the limitation in question is not in the independent claim. *Liebel-Flarsheim Co. v. Medrad*, 358 F.3d 898, 910 (Fed. Cir. 2004).

Claims 19 through 21 (which depend on claim 1) add the limitation of urging the panels together. Furthermore, claim 23 states: “A floor covering panel according to claim 1, wherein the coupling parts are configured such that two identical ones of said floor panel can be selectively coupled either by laterally sliding and snapping the cooperative coupling parts together or by turning one panel relative to the other with their cooperative coupling parts

partially engaged, whereby additional ones of said floor panel can be sequentially coupled to previously coupled ones of said floor panel by laterally sliding each additional panel into a previously coupled panel, or by relative turning motions of an additional panel relative to a coupled panel.” Alloc has not offered an explanation for why the limitations found in the dependent claims, but not in the corresponding independent claim, should be read into the independent claim.

In summary, the Court determines that “locking element” means “a portion of a coupling part having the structure as recited in the claim that allows for engagement and fastening.”

4. Locking Means

The fourth matter for resolution by the Court is the meaning of “locking means” in claims 7 and 52 of the ‘486 patent. Unilin contends that “locking means” in claims 7 and 52 of the ‘486 patent should be replaced by “locking element.” (Unilin Opening Br. 15-16.) Unilin relies upon its July 28, 2000, request for a certificate of correction filed with the United States Patent and Trademark Office (“PTO”) requesting that the term “locking means” in claims 1 and 60 of the ‘486 patent be replaced by the term “locking elements,” to correct an obvious typographical error. (Jt. App. Ex. C 299-300.) The PTO issued the certificate of correction on August 21, 2001. (*Id.* at 301.) Unilin maintains that given the issuance of the certificate of correction, it is clear that the term “locking means” in claims 7 and 52 are also typographical errors and should be construed as “locking elements.” (Unilin Opening Br. 16.)

Additionally, Unilin maintains that *Novo Indus, L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1356 (Fed. Cir. 2003), provides that the Court may correct the errors. (Unilin Opp'n 7-8.) Unilin also contends that in the event that the Court does not correct the claims, “locking means” should not be construed as a means-plus-function claim limitation under 35 U.S.C. § 112 ¶ 6. (*Id.* at 8-9.) Finally, Unilin maintains that regardless of how the term is construed, its construction is the same. (*Id.*)

Alloc argues that the term to be interpreted is “locking means,” not “locking element.” (Alloc Initial Mem. 12.) Alloc maintains that claim 1 uses the term “locking means” and the certificate of correction issued on August 21, 2001, is not applicable because the alleged error does not fall within the statute authorizing the issuance of a certificate of corrections, 35 U.S.C. § 255, because “locking means” was not a clerical or typographical error or a minor error. (Alloc Initial Mem. 12-13.) Alloc also contends the certificate of correction does not apply because this action was filed before the issuance of the certificate of correction, citing *SW Software, Inc. v. Harlequin Inc.*, 226 F.3d 1280, 1297 (Fed. Cir. 2000). Alloc also asserts that “locking means” is a means-plus-function limitation; that is, “locking means” is limited to structures disclosed in the ‘486 patent specification which are

described as used for the function of “locking” and equivalents thereof. (Joint Claim Constr. Charts, ‘486 chart 3.)⁸

Claim 7 of the ‘486 patent states: “A floor covering panel according to claim 6, wherein both contact surfaces are inclined in a generally parallel directions, so that they will at least partially abut each other when cooperative coupling parts of said **locking means** are coupled together with said contact surfaces located contiguous with each other.” (‘486 patent, 14:47-52) (emphasis added.) Claim 52 of the ‘486 patent states: “A floor covering panel according to claim 1, wherein the panel has a pair of opposed short sides and a pair of opposed longer sides and wherein the **locking means** are provided on all four sides, and wherein the

⁸ Alloc’s argument derives from paragraph 6 of Section 112 of Title 35 of the United States Code which provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112.

Rodime PLC v. Seagate Tech., Inc., 174 F.3d 1294, 1302 (Fed. Cir. 1999) explains:

The word “means” is “part of the classic template for functional claim elements.” *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427 (Fed. Cir. 1997). Accordingly, in determining whether a claim element falls within § 112, ¶ 6, this court has presumed an applicant advisedly used the word “means” to invoke the statutory mandates for means-plus-function clauses. *See id.* Two specific rules, however, overcome this presumption. First, a claim element that uses the word “means” but recites no function corresponding to the means does not invoke § 112, ¶ 6. *See id.* at 1427. Second, even if the claim element specifies a function, if it also recites sufficient structure or material for performing that function, § 112, ¶ 6 does not apply. *See id.* at 1427-28 (“[W]here a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format.”); *Personalized Media [Commc’n, LLC v. Int’l Trade Commc’n]*, 161 F.3d [696] at 704 [Fed. Cir. 1988] (“In deciding whether [the] presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, ¶ 6.”); *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996) (“An element with such a detailed recitation of structure . . . cannot meet the requirements of [§ 112, ¶ 6].”).

In construing a means-plus-function limitation, a court must identify both the claimed function and the corresponding structure in the written description for performing that function. *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1350 (Fed. Cir. 2003).

common plane of tangency of the contact surfaces on the short side has a steeper inclination than on the longer side.” (‘486 patent, 18:19-26) (emphasis added.)

Regardless of the effective date of the certificate of correction, *Novo Indus, L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1356 (Fed. Cir. 2003), holds that Congress intended to preserve the authority of the district courts to correct errors. But, Congress did not intend that the district courts have the authority to correct any and all errors that the PTO would be authorized to correct under sections 254 and 255. *Id.* A district court may correct errors if: (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification; and, (2) the prosecution history does not suggest a different interpretation of the claims. *Id.* at 1354.

Unilin asserts that the correction of “locking means” to “locking element” satisfies such standard. In contending, that the prosecution history does not suggest a different interpretation of the claims, Unilin also relies upon a substitute specification which it states was omitted from exhibit C of the parties’ joint appendix. (Unilin Opp’n 8 & n.2 (citing Jt. App. Ex. C 216), Ex. 13.)

In considering whether there can be “reasonable debate” that “locking means” in claims 7 and 52 should be corrected to read “locking element,” the application for a certificate of correction and its issuance acknowledges that the same errors occurred in two other ‘486 patent claims.⁹ Claims 7 and 52 are dependent claims of claim 1. (Claim 7 actually depends on claim 6 which depends on claim 1). The patent abstract states that the coupling

⁹The question came to mind as to why Unilin would correct some, but not all, of the errors. But, the Court has not speculated on Unilin’s reasoning — if any exists.

parts are provided with “integrated mechanical locking elements (6).” The brief summary of the invention also explains that “the coupling parts are provided with integrated mechanical locking elements.” (‘486 patent, 2:17-18.) “Locking element,” is used three times in claim 1. “[S]aid locking means” appears one time in claim 1, but that phrase was addressed by the certificate of correction. Furthermore, although “locking means” appears in other portions of the specification (*see e.g.*, ‘486 patent, 3:5-6;4:12), it does not appear in the context of a means-plus-function limitation. “Means” is used in claims 7 and 52, but neither claim recites any corresponding function for the means. *See Rodime*, 174 F.3d at 1302.

Moreover, by incorporated claim 1, claims 7 and 52 recite sufficient structure for performing that function. *Id.* Specifically, claim 1 provides: “said locking means comprising a locking element in the form of a downwardly extending protrusion located on the lower side of the tongue” and “an upwardly facing cooperating locking recess in the lower lip, said locking recess being located at a position that is at least partially distally beyond a distal edge at which the upper lip terminates.” Thus, the Court concludes there is not reasonable debate that the term “locking means” in claims 7 and 52, should be “locking elements.”

The supplemental prosecution history provided by Unilin affords further support for the Court’s conclusion. The marked-up version of the specification indicates that the drafter regarded “locking element” interchangeably with “locking means.” (*See* Unilin Opp’n, Ex. 13, 3-5, 10-12, 15 & 25.) There is no indication that the prosecution history

suggests a different interpretation of the claims. Therefore, “locking means” as used in claims 7 and 52 of the ‘486 patent is replaced with “locking element.”

5. Contact Surfaces-Substantial Separation

The next term for interpretation is “contact surfaces” and “substantial separation” in claims 1 and 65 of the ‘486 patent. Unilin contends that “contact surfaces” and “substantial separation” as used in claims 1 and 65 of the ‘486 patent should be construed as “a surface on a locking element that comes into contact with a corresponding surface on an opposing locking element that prevents a sustained separation visible to the unaided eye of the user from a normal height viewing a flooring made up of joined panels.” (Unilin Open. Br. 16-18.) Alloc maintains that “contact surfaces” should be interpreted as meaning “surfaces that abut one another when the panels are in their coupled position and prevent separation of the coupled panels in the horizontal direction away from each other at the joined edges.” (Alloc Initial Mem. 12.)

A representative use of the terms appear in claim 1 as follows: “cooperative **contact surfaces** arranged to be engaged when adjacent identical ones of said panel are coupled together with their coupling parts cooperatively engaged to prevent **substantial separation** of two coupled identical ones of said floor panels at said upper side edges in a direction perpendicular to the edges of the panel sides and parallel to the undersides of the coupled floor panels.” (‘486 patent, 14:5-12) (emphasis added.)

The ‘486 patent specification provides background for the interpretation of the terms indicating that one of the “aims” of the invention is “a floor covering whereby the

subsequent development of gaps is excluded or at least counteracted in an optimum manner, whereby also the possibility of the penetration dirt and humidity is minimalized.” (‘486 patent, 2:8-12.) In part, the invention consists “of hard floor panels which, at least at the edges of the two opposite sides, are provided with coupling parts, cooperating which [sic] each other . . . wherein the coupling parts are provided with integrated mechanical locking elements which prevent the drifting apart of two coupled floor panels into a direction perpendicular to the related edges and parallel to the underside of the coupled floor panels.” (‘486 patent, 2:14-22.)

The first portion of Unilin’s proposed definition which states “a surface on a locking element that comes into contact with a corresponding surface on an opposing locking element that prevents a sustained separation,” is largely consistent with the language of the claims and the patent specification. (Both Unilin and Alloc’s proposed definitions use “surface” which is part of the phrases which they have asked the Court to define – so apparently that term is understood by the parties and does not need interpretation. Indeed, “surface” is defined as “exterior or boundary of an object.” *See Jt. App. Ex. 4 1187.* An attempt to substitute that term might make interpretation of the patent claims more difficult.)

But, what does Unilin mean by a “sustained” separation? And, is that synonymous with a “substantial” separation? Alloc’s proposed definition omits the concept reflected by the word “substantial.” The definition of “substantial” includes “significantly large.” (Jt. App. Ex. 4 1176.) The definition of “substantial” is consistent with the specification and appropriately supplements the definition and, in the context of the patent claims and specification, is a more appropriate choice than “sustained.”

Unilin also asserts that the term be interpreted to require that the contact surfaces lack separation visible to the “unaided eye of the user from a normal height viewing a flooring made up of joined panels.” But, it has not demonstrated the basis for its contention. And, query, whose “normal height?” Is it the normal height of a person skilled in the art at the time of the object’s invention? Given these problems, the latter portion of Unilin’s proposed definition is not adopted.

Alloc suggests that the language should also include that the separation prevented is that of “of the coupled panels in the horizontal direction away from each other at the joined edges.” However, both claims 1 and 65 describe the directions in which separation is prevented so such descriptive language proposed by Alloc is superfluous.

Thus, the Court concludes “contact surfaces” and “substantial separation” as used in claims 1 and 65 of the ‘486 means “a surface on a locking element that comes into contact with a corresponding surface on an opposing locking element that prevents a significantly large separation.”

6. Recess

The next term for interpretation is “recess” in claims 1, 8, 11, 14, 18, 65 of the ‘486 patent and claims 1, 10, 23 of the ‘836 patent. Unilin maintains that “recess” means “an indentation or small hollow.” (Unilin Open. Br. 18.) Alloc states that it does not contend that “recess” has any special meaning and indicates that a “recess” is a small indentation or hollow. (Alloc Resp. Mem. 16). However, Alloc contends that, in the context of the claims of the ‘486 patent, there must be a “recess” of a particular kind – one that acts as a locking

element. (*Id.*) Thus, Alloc indicates that “recess” should be interpreted as meaning “an indentation or small hollow that is part of a locking element or otherwise performing a locking function.” (Alloc Resp. Mem. 15-18.)

Unilin asserts that Alloc is proposing a construction that would limit the scope of the term “recess” to only that part of the recess that “performs a locking function” and has incorrectly transposed the structural requirements of the “recess” and the “locking element.” (Unilin Reply Claim Constr. Br. (“Unilin Reply Br.”) 7.) Alloc counters that Unilin seems to suggest that the italicized phrase in claim 10 of the ‘836 patent modifies the term “lip” rather than the term “recess”; that is, “wherein said locking elements comprise a recess located in a lower lip *extending at least to a side edge and defining at least in part a lower side of said groove* and a protrusion provided at a lower side of said tongue.” (Alloc Reply Mem. 7-8.) But, Alloc states that it is clear from the claim language that the italicized language describes the recess, not the lip. *Id.*

The parties’ arguments focus, in part, on the language of claim 10 of the ‘836 patent which states “wherein said locking elements comprise a **recess** located in a lower lip extending at least to a side edge and defining at least in part a lower side of said groove.” (‘836 patent, 17:42-44) (emphasis added.) Claims containing the transitional phrase “comprising” or “comprises” create an open-ended claim.¹⁰ See *Scanner Techs. Corp. v. ICOS*

¹⁰An example of an open-ended claim is found in *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1371 (Fed. Cir. 2005) (holding that a claim directed to a razor “comprising . . . a group of first, second, and third blades” did not exclude a razor having four blades, noting that the “word ‘comprising’ transitioning from the preamble to the body signals that the entire claim is presumptively open-ended. . . . The addition of elements not recited in the claim cannot defeat infringement”).

Vision Systems Corp., N.V., 365 F.3d 1299, 1304 (Fed. Cir. 2004) (construction of “comprises an illumination apparatus”). Claim 10 indicates that a “recess” is part of the locking element. Thus, there is no need to include reference to the locking element in the definition of recess.

The term “recess” is used in claims of the ‘486 patent and ‘836 patent claims other than claim 10. Claim terms are normally used consistently throughout a patent. *See Phillips*, 415 F.3d at 1314. As with claim 10, the other words of the specific claims give further context to the term “recess.” *See id.*

The specification states: “As represented in Figs. 5 to 7, the locking element 33 preferably consists of a protrusion of the lower side 35 of the tongue 31 which can be located in a recess 36 in a lower lip 43 extending distally from the lower wall 37 of the groove. The locking element 34 is formed by the upward directed part or protrusion which defines the distally outer end of the recess 36.” (‘486 patent, 6:54-56.) The specification shows that as long as a portion of an indentation or hollow is part of the locking element or performs a locking function, then the entire indentation or hollow is within the scope of the claim term “recess.”

Unilin’s suggested definition of “recess” is consistent with its ordinary definition. (Jt. App. Ex. 6 (*American Heritage Dictionary* (4th ed. 2000)) 1459.) Moreover, it is in agreement with the use of “recess” throughout the patent claims. Therefore, the Court interprets “recess” as meaning “an indentation or small hollow.”

7. Side Wall of Said Recess That Slopes Downwardly

In their initial joint claim construction chart filed on February 10, 2005, the parties disagreed on the construction of the phrase “side wall of said recess that slopes downwardly” in claim 1 of the ‘836 patent. The phrase appears in claim 1 of the ‘836 patent as follows: “wherein the bendable portion of the lower lip includes a **side wall of said recess that slopes downwardly** in a direction extending from a distally outer area of said lip towards a proximally inner area of said lip.” (‘836 patent, 14:37-40) (emphasis added.)

In its response brief, Unilin indicates that the parties have reached an agreement that side wall means “a side wall of the recess that slopes downwardly and inwardly.” (Unilin Reply Br. App. A 1.) This agreed definition is supported by the claims, and the patent specification and therefore is adopted by the Court.

8. Common Plane of Tangency

The parties request that the Court interpret “common plane of tangency” which appears in claims 1, 32, and 52 of the ‘486 patent and claim 23 of the ‘836 patent. Unilin states that “common plane of tangency” is “a plane that is tangent to a contact surface of the lower lip at a point of contact with a contact surface of the tongue.” (Unilin Open. Br. 19.) Unilin states that the term is defined in the specification. (*Id.*)

Alloc posits that “common plane of tangency” should be defined as “the common plane which is shared by the contact surfaces when they are abutting up against each other when the panels are coupled together.” (Alloc Initial Mem. 17.) Alloc indicates that the term is defined in the ‘486 patent specification, which states “the common plane of tangency

L which is determined by the common tangent at the meeting point or area of surfaces 38-39, hereby forms an angle A sloping inwardly and downwardly from an outer region to an inner region relative to the underside 7, which angle is smaller than 90°.” (*Id.* (quoting ‘486 patent, 6:60-63).)

The term “common plane of tangency” appears in claim 1 of the ‘486 patent as follows:

said cooperative contact surfaces defined respectively by said protrusion and said recess, and configured, when engaged in a cooperative relationship upon coupling in a common plane of two identical ones of said panel, to meet each other at a **common plane of tangency** that with respect to the lower lip is inclined at an angle other than 90° relative to the common plane of the coupled panels, said angle extending inwardly and downward from a distally outer location to a proximal inner location.

(‘486 patent, 14:18-26) (emphasis added.)

In discussing figures 5 through 7 of the ‘486 patent, the specification states: “the common plane of tangency L which is determined by the common tangent at the meeting point or area of surfaces 38-39, hereby forms an angle A sloping inwardly and downwardly from an outer region to an inner region relative to the underside 7, which angle is smaller than 90 °.”

(‘486 patent, 6:60-63.)¹¹ In discussing figure 9 of the ‘486 patent, the specification states “the common plane of tangency L forms an angle A which is smaller than 90°, and more preferably is smaller than 70°.” (‘486 patent, 7:37-38.)

¹¹The relevant figures of the ‘486 patent and ‘836 patent, which diagram L, the common plane of tangency, and A, the angle, are included at pages 65 through 66 and 68 through 69 of this decision.

Claim 23 of the ‘836 patent states, in pertinent part:

wherein said locking elements comprise a protrusion extending from the lower side of a tongue of said pairs of edges and a cooperating recess in said lower lip, said protrusion and recess fitting together when ones of said panel are coupled by said tongue and groove; wherein, when a complementary tongue and groove are coupled, said protrusion and recess meet each other at contiguous contact surfaces at a **common plane of tangency** that with respect to a common plane of the coupled panels is inclined inwardly from a distally outer area towards a distally inner area at an angle less than 90°.

(‘836 patent, 19:8-19)(emphasis added.) In discussing figures 5 through 7, the ‘836 patent specification states: “[t]he common plane of tangency L which is determined by the common tangent at the meeting point or area of surfaces 38-39, hereby forms an angle A sloping inwardly and downwardly from an outer region to an inner region relative to the underside 7, which angle is smaller than 90°.” (‘836 patent, 6:62:67.) In discussing figure 9, the specification for the ‘836 patent states: “[t]he common plane of tangency L forms an angle A which is smaller than 90°, and more preferably is smaller than 70°.” (‘836 patent, 7:39-41.)

“Tangency” is defined as the quality or state of being tangent. (Jt. App. Ex. 4 1205.) “Tangent plane” is defined as “the plane through a point of a surface that contains tangent lines to all the curves on the surface through the same point.” (*Id.*) Unilin’s suggested definition of the “common plane of tangency” is supported by the claims and is consistent with the specifications. Alloc also indicates that the parties do not have “a substantive disagreement” on the meaning of the phrase. (Alloc Resp. Mem. 19.) Therefore, the Court

construes the “common plane of tangency” as “a plane that is tangent to a contact surface of the lower lip at a point of contact with a contact surface of the tongue.”

9. Free from Play

The parties also disagree on the meaning of “free from play” in claims 15 and 65 of the ‘486 patent. Initially, Unilin argued that the phrase means those panel separation directions are “free from visible spaces (as viewed by a user from a normal height) so as to prevent free movement in the joint” in the vertical and horizontal disassembly directions. (Unilin Open. Br. 19-20.) In its initial and response briefs, Alloc maintained that “free from play” means that “the joint must have no space in all separation directions in a plane extending in a perpendicular direction from the side edges of the panels.” (Alloc Initial Mem. 18.)

At the *Markman* hearing, Alloc proposed a new five point definition of “free from play”:

! “free from” means “without” *Glaxo Group Ltd. v. Ranbaxy Pharms., Inc.*, 262 F.3d 1333, 1336 (Fed. Cir. 2001);

! “play” is a dimensional relationship between contact surfaces whereby there is a separation or space, or an ability for the surfaces to move relative to each other;

! “free from play means an absence of play at the time panels are installed, and also subsequent to installation following the expansion and shrinkage in accordance with normal use;

! ease of displacement along a joined edge is indicative of play; and

! the absence of visible gaps.

Given Alloc's advocacy of a new definition of "free from play," the Court allowed the parties to submit post-hearing briefs addressing that definition and to allow Unilin an opportunity to propose a new definition.

In its post-hearing brief, Unilin modified its original proposed definition of "free from play" suggesting that the term be defined as: "no space between the upper contact surfaces and the lower contact surfaces of the coupling parts, as to lock the coupled panels together in the horizontal positions." (Unilin Post Markman Open. Br. 3.) In its response brief, Unilin states "free from play" means "there are no spaces between the contact surfaces so that the panels are locked in the horizontal and vertical directions." (Unilin's Post Markman Resp. Br. 1.)

Unilin states that to a degree, Alloc's proposed construction is consistent with its revised definition. But, Unilin asserts that Alloc is improperly attempting to read in the following limitations:

- ! an ability for the surfaces to move relative to each other;
- ! "an absence of play . . . subsequent to installation following the expansion and shrinkage in accordance with normal use;
- ! ease of displacement along a joined edge is indicative of play; and,
- ! the absence of visible gaps at the upper surface does not rule out the presence of play.

Unilin maintains that neither the intrinsic nor the extrinsic evidence justify these additional limitations. (*Id.*)

Unilin states that “an ability for the surfaces to move relative to each other” encompasses movement which is not play, because the definition would include the “sliding” of the panels relative to one another which is contrary to the ordinary meaning of “play” and the teachings of the specification. (*Id.* at 1-2.) Unilin also asserts that “an absence of play . . . subsequent to installation following the expansion and shrinkage in accordance with normal use” and the “ease of displacement along a joined edge is indicative of play” are tests for play that should not be included in the construction. (*Id.*) Additionally, Unilin maintains that “an absence of play . . . subsequent to installation following the expansion and shrinkage in accordance with normal use” is an attempt to read in a limitation from a preferred embodiment. (*Id.* at 3.)

“Free from play” appears in claim 15 as follows: “A floor covering panel according to claim 1, wherein the coupling parts are dimensioned to provide a coupling **free from play** in all panel separation directions in a plane extending perpendicular to the said side edges when two identical ones of said panel are coupled together.” (‘486 patent, 15:22-26) (emphasis added.) Claim 65 includes the term as follows: “said coupling parts being dimensioned to provide a coupling **free from play** in all panel separation directions in a plane extending perpendicular to the side edges when two identical ones of said panel are coupled together.” (‘486 patent, 20:23-27) (emphasis added.)

In considering the appropriate definition of “free from play,” the Court notes that the ‘486 patent specification comments that one disadvantage of related inventions is that couplings which allow coupling parts to snap fit into each other does not allow for a 100

percent optimum counteraction against the development of gaps between floor panels because “well-defined plays” have to be provided in order to be sure that the snapping-together is possible. (‘486 patent, 1:47-55.) The “brief summary of the invention,” provides that “these coupling parts are optimized in such a manner that they allow that any form of play is counteracted and preferably is excluded.” (‘486 patent, 2:21-24.)

The description of the second preferred embodiment states that describes “coupling parts which **are interlocked free from play in all directions in a plane extending perpendicular to aforementioned edges.**” (‘486 patent, 2:49-51) (emphasis added.) Such description further states: “[d]ue to the fact that the coupling parts provide for an interlocking free from play, as well as due to the fact that these coupling parts are manufactured in one piece, from the basic material of the floor panels, a perfect connection between adjacent floor panels can always be guaranteed, even with repeated expansion and shrinkage of the floor surface.” (‘486 patent, 2:63-66; 3:1-3.) The specification discusses “free from play” in context of the snapping-together, joining, and interlocking of panels. Alloc suggests that “free from play” extends to the panels once they are joined. But, the patent specification does not support Alloc’s construction, and therefore, it is not acceptable.

Furthermore, the specification refers to post joinder movement as “expansion and shrinkage,” and “floor panels drifting apart, as a result of which undesirable gaps can be formed.” (‘486 patent, 1:33-35.) The claims must be read in light of the specification, the “single best guide to the meaning of a disputed term.”” *Aero Prods. Int’l, Inc. v. Intex Recreation Corp.*, 466 F.3d 1000, 1010 (Fed. Cir. 2006) Alloc’s construction of “free from

“play” as including “an absence of play . . . subsequent to installation following the expansion and shrinkage in accordance with normal use” is not supported by the specification and therefore, is rejected. *See Phillips*, 415 F.3d at 1316 (quoting *Merek & Co. v. Teva Pharmas. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003)). Similarly, Alloc’s suggestion that the term “free from play” means “an ability for the surfaces to move relative to each other” is inconsistent with the specification and is rejected. *See id.*

Alloc contends that Unilin cannot dispute that the absence of visible gaps at the upper surface does not rule out the presence of play, noting that Unilin made that statement in a brief to the European Patent Office. Specifically, in response to opposition proceedings to the European version of its main claim in the ‘486 patent, Unilin stated that “[a]lthough the videotape does not show visible gaps on the upper surface of the floor covering, play can still be present between the locking surface and the locking groove in the joint.” (Alloc Markman Hrg. Ex. Tab U, 22 ¶ 39.)¹² In that same response to the European opposition proceedings, Unilin also stated that the videotape showed that the Alloc panels could be easily displaced with respect to one another as demonstrated by the person straddling the joint between two panels and moving the panels relative to each other by applying a “kicking” force through the sole of his shoe. (*Id.*) Unilin then stated that “[s]uch ease of displacement is indicative of play.”

¹²At the *Markman* hearing before this Court, counsel for Alloc explained that the videotape was made at the 1996 Domotex trade show, where Alloc’s new product was displayed and videotaped. (Decl. of Patrick M. Kuhlman (“Kuhlman”) ¶ 4, Tab 17,67-70.)

(*Id.*) Unilin’s two comments in its response to the European patent opposition proceedings are extrinsic, not intrinsic, evidence.¹³

Chimie v. PPG Indus. Inc., 402 F.3d 1371, 1374 (Fed. Cir. 2005), is cited by Alloc as authority indicating that a test may be included in a construction of a term. *Chimie* involved the construction of the term “dust-free and non-dusting” in a patent for “essentially spheroidal precipitated silica particulates.” *Id.* PPG, the alleged infringer, contended that the term should be interpreted literally to mean “no dust cloud whatsoever.” *Id.* at 1375. The patent assignee contended that the term should mean “very low-dust.” *Id.*

The appeals court upheld the district court’s construction of the disputed term as “a level of dust formation associated with the silica particulates of the ‘234 patent, as measured in percentage weight according to DIN 53 583, that has a fines content value less than or equal to 13 and weight loss by abrasion value less than or equal to 0.5.” *Id.* The appellate court noted that the district court had explained that “DIN 53 583 is an industrial standard provided by the Deutsches Institut fur Normung e.V., a self-governing institution of trade and industry responsible for the preparation of National Standards in Germany, for measuring the fines content and weight loss by abrasion of palletized carbon black used as

¹³The Court of Appeals for the Federal Circuit has, on occasion, used statements made in front of foreign patent offices regarding related patents to determine what a person of ordinary skill in the art understands terms to mean, but it has never made them a part of the intrinsic record for claim construction purposes. See *Phillips*, 415 F.3d at 1317 (defining intrinsic prosecution history to include “the complete record of the proceedings before the PTO and . . . the prior art cited during the examination of the patent” and extrinsic evidence to include “all evidence external to the patent and prosecution history” (quotations and citations omitted)); *Gillette Co.*, 405 F.3d at 1374 (referencing statements made regarding a related patent in front of foreign patent offices but not characterizing them as intrinsic prosecution history of the patent at issue); *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 870 n.6 (Fed. Cir. 2004) (Leaving unresolved the question of whether statements the applicants had made during the prosecution of foreign patent applications may limit claims – the intrinsic record had sufficed to support the claim construction); *Tanabe Seiyaku Co., Ltd. v. U.S. Int’l Trade Comm’n*, 109 F.3d 726, 733 (Fed. Cir. 1997) (“In evaluating infringement under the doctrine of equivalents, ‘representation[s] to foreign patent offices should be considered . . . when [they] comprise relevant evidence.’” (citation omitted)).

fillers in the rubber processing industry.” *Id.* In the patent specification, the inventors of the patented device had made specific reference to that standard as a means of measuring the dust qualities of their silica. *Id.*

Chimie supports the proposition that a test may be included in the definition of a claim term. However, *Chimie* was based on specific accepted industry test which was discussed in the patent specification.

Chimie is distinguishable. The “test” was an industry standard for dust *and* was included within the specification. Neither is true of the “tests” suggested by Alloc. Thus, at this juncture, the Court declines to construe “free from play” as including the fourth and fifth prongs proposed by Alloc; that is, “ease of displacement along a joined edge is indicative of play; and, “the absence of visible gaps at the upper surface does not rule out the presence of play.” The Court construes “free from play” as “there are no spaces between the contact surfaces so that the panels are locked in the horizontal and vertical directions.”

10. Identical

The parties do not agree on the proper interpretation of “identical” in claims 1, 15 through 17, 15 through 20, 23, 29, 31, 37 through 38, 41 through 42, 50, 59, and 65 of the ‘486 patent and claims 1 through 3, 10 through 12, 23, 27 through 28, and 30.

Unilin takes the position that “identical” means “essentially the same or having the same origin.” (Unilin Open. Br. 22-24.) Alloc states that “identical” means “the same.” (Alloc Initial Mem. 16-17.) (citing *Merriam Webster’s On Line Dictionary* and *Lampi v. Am. Power Prods.*, No. 93-C-1255, 1997 U.S. Dist. LEXIS 9942, 1997 WL 392239 *7-*8 (N.D.

III. July 8, 1997.) Unilin maintains that Alloc's proposed construction of "identical" for the claims in which "identical" modifies "one of said panels" is insufficient. At the *Markman* hearing, Alloc stipulated that "identical" did not rule out minor machining variations.

The term "identical" appears in claim 1 of the '486 patent as follows:

said coupling parts configured to cooperate by coupling with cooperative coupling parts of **an identical** one of said panel; said coupling parts comprising a tongue and a groove configured to lock together coupled **identical** ones of said panel in a direction perpendicular to the plane of the coupled panels when cooperative coupling parts of the panels are engaged, . . . said locking elements including cooperative contact surfaces arranged to be engaged when adjacent **identical** ones of said panel are coupled together with their coupling parts cooperatively engaged to prevent substantial separation of two coupled **identical** ones of said floor panels at said upper side edges in a direction perpendicular to the edges of the panel sides and parallel to the undersides of the coupled floor panels; . . . said cooperative contact surfaces defined respectively by said protrusion and said recess, and configured, when engaged in a cooperative relationship upon coupling in a common plane of **two identical ones of said panel**,

('486 patent, 13:58-64; 14:3-21) (emphasis added.)

It is well established that if more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all consistent meanings. *See Brookhill-Wilk 1, LLC. v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1300 (Fed. Cir. 2003). In support of its contention that more than one meaning of "identical" is consistent with the specification, Unilin cites four excerpts of language found in the "Brief

Summary of the Invention” portion of the ‘486 patent specification, (1:66-2:22; 2:38-40; 3:19-22; 4:9-10.) Unilin also cites claim 61 of the ‘486 patent — a “method” claim. Unilin has not articulated why it believes the cited portions of the specification and claim 61 support its contention. Unilin has not persuaded the Court that more than one meaning of “identical” is supported by the specification.

Both proposed definitions of “identical” are consistent with dictionary definitions of identical. However, the definition of “identical” as meaning “the same” comports best with the use of “identical” in the patent claims and specification. Unilin’s definition would add ambiguity. Therefore, the Court construes “identical” as meaning “the same,” noting that such definition does not rule out minor machining variations.

11. Biasing Force

The next term for construction is “biasing force” which appears in claims 1 through 3 and claims 6 and 7 of the ‘836 patent. In claim 1, the term appears as follows:

a coupling part of said panel, when engaged with a complementary coupling part of another one of said panel, configured and arranged to produce **a biasing force** between such coupled panels tending to urge the panels towards each other; at least one of said coupling parts including an elastically bendable portion having a relaxed unbent position, and which, when in a coupled condition, is at least partially bent out of its normal relaxed position and thereby provides **said biasing force**.

(‘836 patent, 14:7-16) (emphasis added.)

In claim 3, the term appears in the following context: “to produce a resultant **biassing force** maintaining the panels compressed against each other at the coupled side edges.” (‘836 patent, 14:62-65) (emphasis added.)

Unilin maintains that “biassing force” means “force acting within a joint that urges the panels together after coupling.” (Unilin Opp’n Br. 15.) Alloc states that it has no substantial disagreement with Unilin’s proposed interpretation. (Alloc Resp. Mem. 13.) Alloc states that it is clear that such force must be in effect after the panels have been joined and that the term “biassing force” does not apply to any forces that are at work during the installation or assembly of the panels. (*Id.*)

The parties’ proposed construction of “biassing force” is consistent with the specification and claims and, therefore, is adopted. “Biassing force” means “force acting within a joint that urges the panels together after coupling.”

12. Elastically Bendable Portion

Because the parties could not agree, they requested that the Court interpret “elastically bendable portion” as it appears in ‘836 patent claims 1 through 7, and claim 26. Unilin states “elastically bendable portion” means “a resilient portion of a coupling part.” (Unilin Open. Br. 25-26.) Alloc states it has no substantial disagreement. (Alloc Resp. Mem. 13.)

Claim 1 states in pertinent part:

at least one of said coupling parts including an **elastically bendable portion** having a relaxed unbent position, and which, when in a coupled condition, is at least partially bent out of its normal

relaxed position and thereby provides said biasing force; wherein the **elastically bendable portion** of said one of said coupling part comprises a lower lip defined at least in part by a lower side of the groove of said coupling parts, said lower lip cooperating with a mating portion of a tongue of a cooperating coupling part; wherein said lip when bent extends in a downward direction relative to the panel underside when the panel is coupled by cooperative complementary coupling parts to another one of said panel; wherein the panel comprises a core comprising a material selected from the group consisting of HDF and MDF board; said lower lip is substantially formed of said core; one of said locking elements comprises a recess in said lower lip, said recess having a lowermost bottom area; said groove having a deepest point within the panel; and wherein **said elastically bendable portion** of the lower lip comprises a portion of said lower lip located between the deepest point of said groove and the lowermost bottom area of said recess; wherein the bendable portion of the lower lip includes a side wall of said recess that slopes downwardly in a direction extending from a distally outer area of said lip towards a proximally inner area of said lip.

(‘836 patent, 14:12-40) (emphasis added.) Unilin’s proposed construction is consistent with the language of the claims and the specification. Therefore, the Court adopts the definition of “elastically bendable portion” as meaning “a resilient portion of a coupling part.”

13. Snap-Together Coupling - Snap Action Shifting Them Laterally

The parties also requested that, due to their disagreement, the Court interpret the terms “snap-together coupling” and “snap-action shifting them laterally” in claims 10, 23, and 27 of the ‘836 patent. Unilin maintains that “snap-together coupling” and “snap-action shifting them laterally” is “a device that serves to connect the ends of adjacent parts or objects

by snap-action, which is characterized by a rapid resilient movement towards a geometry, immediately precipitated by the reduction of a resisting force, when the panels are joined by shifting them laterally in a substantially co-planar fashion.” (Unilin Open. Br. 26-27.)

Alloc initially proposed its own definition. However, in its response brief, Alloc states that it has no substantial disagreement with Unilin’s proposed definition. (Alloc Resp. Mem. 13.)

Claim 10 of the ‘836 patent uses the term in a representative fashion as follows: “the locking elements of said second pair of opposite side edges provide a **snap-together coupling** providing a snap-action during the coupling of two panels by **shifting them laterally** towards each other, said snap action being delivered substantially by said core material.” (‘836 patent, 17:36-41) (emphasis added.)

Unilin’s proposed definition is consistent with the use of the terms in the claims and specification. Therefore, the Court defines “snap-together coupling” and “snap-action shifting them laterally” as “a device that serves to connect the ends of adjacent parts or objects by snap-action, which is characterized by a rapid resilient movement towards a geometry, immediately precipitated by the reduction of a resisting force, when the panels are joined by shifting them laterally in a substantially co-planar fashion.”

14. Snap Type Elements

Due to their disagreement on the construction of “snap type elements” in claim 31 of the ‘486 patent, the parties request that the Court construe the term. Unilin maintains that “snap type elements” are “elements that are capable of exhibiting snap action.” (Unilin

Open. Br. 27-28.) Alloc states “snap type elements” should be interpreted as are “ones that make a distinct snapping sound when coupling of the panels is competed by lateral, in-plane shifting.” (Joint Charts, ‘486 chart 9.)

The phrase “snap type elements” is used in claim 31 of the ‘486 patent as follows: “A floor covering panel according to claim 1, wherein the locking elements are **snap type elements** that are configured so as to snap together when cooperative locking elements of two identical ones of said panel are coupled together.” (‘486 patent, 16:42-46.)

Unilin’s definition makes the most sense in context of the patent claims and specification. The patent specification focuses on physical action of coupling panels not on sound. The “background of the invention” portion of the patent specification, states:

couplings are known which allow coupling parts to **snap fit into each other**, e.g., from the documents WO 94/1628, WO 96/27719 and WO 96/27721. The snapping-together effect obtained with these forms of embodiment, however, does not guarantee a 100-percent optimum counteraction against the development of gaps between the floor panels, more particularly, because in fact well-defined plays have to be provided in order to be sure that the **snapping-together** is possible.

(‘486 patent, 1:48-56) (emphasis added.)

A feature of the second preferred embodiment is “the coupling parts have such a shape that two subsequent floor panels can be **engaged into each other exclusively by snapping together** and/or turning, whereby each subsequent floor panel can be inserted laterally into the previous.” (‘486 patent, 2:45-49) (emphasis added.) Likewise, the detailed description states: “the coupling parts 4-5 have such a shape that two subsequent floor panels

1 can be engaged into each other solely by snapping-together and/or turning after the coupling parts are partially engaged, whereby each subsequent floor panel 1 can be laterally inserted into the previous.” (‘486 patent, 5:35-40.)

The foregoing excerpts from the patent specification indicate that snap action relates to the physical assembly of the panels – not to any sound generated by such assembly. Additionally, inclusion of a statement “when coupling of the panels is competed by lateral, in-plane shifting,” in the definition, as suggested by Alloc, is not supported by the specification. Therefore, the Court defines “snap type elements” as “elements that are capable of exhibiting snap action.”

15. Laterally Sliding and Snapping the Cooperative Coupling Parts Together

The parties also requested that the Court interpret the term “laterally sliding and snapping the cooperative coupling parts together” which appears in claims 23, 29 and 65 of the ‘486 patent. Unilin states that “laterally sliding and snapping the cooperative coupling parts together” means “the panels are joined by moving them towards each other in substantially a common plane and coupled via a snap action.” (Unilin Open. Br. 28-29.) Unilin states that this is similar to the phrase “shifting them laterally towards each other.” (*Id.* at 28.)

Alloc initially proposed a different construction. However, in its response brief Alloc states that it has no substantial disagreement with Unilin’s proposed construction. (Alloc Resp. Mem. 13-14.)

A representative use of the phrase appears in claim 23 of the ‘486 patent as follows: “A floor covering panel according to claim 1, wherein the coupling parts are configured such that two identical ones of said floor panel can be selectively coupled either by **laterally sliding and snapping the cooperative coupling parts together** or by turning one panel relative to the other with their cooperative coupling parts partially engaged, whereby additional ones of said floor panel can be sequentially coupled to previously coupled ones of said floor panel by laterally sliding each additional panel into a previously coupled panel, or by relative turning motions of an additional panel relative to a coupled panel.” (‘486 patent, 15:63-67; 16:1-7) (emphasis added.)

Unilin’s proposed definition is consistent with the patent claims and specification and, therefore, the Court adopts that definition. Thus, in claims 23, 29 and 65 of the ‘486 patent “laterally sliding and snapping the cooperative coupling parts together” means “the panels are joined by moving them towards each other in substantially a common plane and coupled via a snap action.”

16. At Least One of the Side Edge of Both Pairs of the Side Edges

The next term to be addressed is “at least one of the side edge of both pairs of the side edges” in claim 10 of the ‘836 patent. Unilin states that there are at least two grooves that are identified by claim 10. (Unilin Open. Br. 29.) Therefore, Unilin states that such limitation “requires only one of the two grooves previously identified in the claim needs to have an upper lip above the groove.” (*Id.*)

Alloc responds that the limitation is confusing and makes no sense; it therefore renders this claim indefinite under 35 U.S.C. § 112, ¶ 2 for failure to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. (Joint Charts, ‘836 chart, 11.) Alloc has not proposed an alternative construction.

The disputed term appears in claim 10 of the ‘836 patent as follows:

wherein the panels at the side edge comprising the groove, of **at least one of the side edge of both pairs of the side edges**, include an upper lip above the groove, said upper lip defining at least in part an upper side of said groove, and said upper lip terminating at a distal outer end, wherein said lower lip extends distally beyond the distal outer end of the upper lip, and further wherein the recess is located in the lower lip in an area of the lower lip that is located at least partly beyond the distal outer end of the upper lip.

(‘836 patent, 17:46-55) (emphasis added.) Claim 10 of the ‘836 patent states “said panel comprising a first pair and a second pair of opposed side edges, said panel further comprising generally complementary coupling parts located at both of the pairs of said side edges.” (17:16-18.) Thus, there are at least two grooves on each panel. The construction of “at least one of the side edge of both pairs of the side edges” as requiring “that only one of the two grooves previously identified in the claim needs to have an upper lip above the groove” is consistent with the language of claim 10 and, therefore, is adopted by the Court.

17. Coupling in a Common Plane

The parties disagree on the proper construction of “coupling in a common plane,” and request that the Court interpret the term. Alloc maintains that “coupling in a

common plane” as used in claim 1 of the ‘486 patent is “an obvious reference” to joining the panels by shifting them in a common plane which is sometimes referred to as “snapping” them together. (Alloc Resp. Mem 10.) It asserts that the limitation is subsumed in the limitation that arises out of the file history calling for the panels to be assembled alternatively by sliding the panels toward each other laterally or by rotating the panels together. (*Id.*)

Unilin maintains that “coupling in a common plane” makes no reference to how the panels are coupled. (Unilin Reply Br. 3.) Rather, states Unilin, a reading of the phrase in context discloses that it describes the position of the panels in relation to each other after they are coupled. (*Id.*)

The phase “coupling in a common plane” appears in claim 1 of the ‘486 patent as follows:

said locking means comprising a locking element in the form of a downwardly extending protrusion located on the lower side of the tongue and an upwardly facing cooperating locking recess in the lower lip, said locking recess being located at a position that is at least partially distally beyond a distal edge at which the upper lip terminates, said cooperative contact surfaces defined respectively by said protrusion and said recess, and configured, when engaged in a cooperative relationship upon **coupling in a common plane** of two identical ones of said panel, to meet each other at a common plane of tangency that with respect to the lower lip is inclined at an angle other than 90° relative to the common plane of the coupled panels, said angle extending inwardly and downward from a distally outer location to a proximal inner location.

(‘486 patent, 14: 16-26) (emphasis added.)

Claim terms must be read in the context of the claim. *Phillips*, 415 F.3d at 1313.

Having carefully considered the phrase “coupling in a common plane” in context as required under claim construction law, this Court concludes that the term describes the panels once they are coupled. The panels become “engaged” in a cooperative relationship once they are joined. The use of the past tense of engage, “engaged,” indicates that the panels have been joined. Alloc’s definition is inconsistent with the patent specification. Unilin’s definition comports with the language in claim 1 of the ‘486 patent.

Also, comparison with the language in claims 23, 29, 38, 39 through 40, and 65 of the ‘486 patent shows that when “laterally shifting in the common plane,” is required the limitation is explicitly stated in the claim. Alloc’s interpretation would render meaningless the claim language of dependent claims 23, 29, 38 through 40. Again the doctrine of claim differentiation suggests that Alloc’s interpretation is incorrect. *See Liebel-Flarsheim Co.*, 358 F.3d at 910.

In light of the foregoing, the Court concludes that the phrase “coupling in a common plane” describes the position of the panels in relation to each other after they are coupled.

18. A Recess Located in a Lower Lip Extending to a Side Edge and Defining At Least in Part a Lower Side of Said Groove

The parties disagree on the meaning of “a recess located in a lower lip extending to a side edge and defining at least in part a lower side of said groove” in claim 10 of the ‘836 patent. Alloc states that “a recess located in a lower lip extending to a side edge and defining at least in part a lower side of said groove” means that “the recess must extend at least to a side

edge and must define a part of the lower side of the groove.” (Alloc Resp. Mem. 17-18.)

Unilin maintains that “a recess located in a lower lip extending to a side edge and defining at least in part a lower side of said groove” means “it is the lower lip that must extend to a side edge and define at least in part a lower side of the groove.” (Unilin Reply Br. 7-8.)

Claim 10 of the ‘836 patent reads:

[W]herein said locking elements comprise a recess located in a lower lip **extending at least to a side edge and defining at least in part a lower side of said groove**; and a protrusion provided at a lower side of said tongue;
wherein the-[sic]panels at the side edge comprising the groove, of at least one of the side edge of both pairs of the side edges, include an upper lip above the groove, said upper lip defining at least in part an upper side of said groove, and said upper lip terminating at a distal outer end, wherein said lower lip extends distally beyond the distal outer end of the upper lip, and further wherein the recess is located in the lower lip in an area of the lower lip that is located at least partly beyond the distal outer end of the upper lip.

(‘836 patent, 17:42-55) (emphasis added.)

While Alloc suggests that the language in bold type modifies the term “recess,” the language “extending at least to a side edge and defining at least in part a lower side of said groove” is more properly read as modifying the more proximate term “lip.” Such construction is consistent with the remainder of the claim which recites analogously that the upper lip above the groove “defin[es] at least in part an upper side of said groove.” (‘836 patent, 17:48-50.) This construction is reinforced by reference to the final phrase of claim 10, which states “and

further wherein the recess is located in the lower lip in an area of the lower lip that is located at least partly beyond the distal outer end of the upper lip.” (‘836 patent 17:52-55.)

Specification figures 22 through 25 of the ‘836 patent also support the Court’s construction of the phrase. Those figures (*see infra* at 70-71) demonstrate that the lower lip 43 extends at least to a side edge. Therefore, “a recess located in a lower lip extending to a side edge and defining at least in part a lower side of said groove” means “it is the lower lip that must extend to a side edge and define at least in part a lower side of the groove.”

19. Angle of the Common Plane of the Coupled Panels

Alloc requests that the Court interpret “angle of the common plane of the coupled panels” in claims 1 and 65 of the ‘486 patent. Alloc states that “angle of the common plane of the coupled panels” in the ‘486 patent refers to the angle between the coupled contact surfaces and the surface of the panel. (Alloc Initial Mem. 17-18.) Alloc states that the angle made by the two planes must be other than 90°, in claim 1 of the ‘486 patent, and in claim 65 of the ‘486 patent, the angle is “30° to 70°.” (*Id.*) In so contending, Alloc relies upon its interpretation of the file history involving the British patent. (*Id.* at 17.)

Unilin states that it is unclear to what element Alloc refers since such language is not in the ‘486 patent claims, and it is nonsensical for a single plane to have an angle. (Unilin Opp’n 14.) Unilin states that Alloc appears to be referring to the angle that is formed between the “common plane of tangency” and the “common plane of the coupled panels” as recited in claims 1 and 65 of the ‘486 patent. (*Id.*) Unilin states that because the claim language is clear, it does not believe claim construction is necessary. (*Id.*) But, to extent a

construction is needed, Unilin states that for claim 1, the angle between the common plane of tangency and the common plane formed by the connected panels, is other than 90°, and for claim 65, the angle formed is 30° to 70°. (*Id.*)

In its response memorandum, Alloc states that as to claim 1, the reference requires that “the panels have contact surfaces that, when the panels are locked together, meet in a common plane that is at an angle other than 90° with respect to the plane of the joined panels.” (Alloc Reply 10.) Further, as to claim 65, Alloc states that the term requires that the panels must have contact surfaces that, when the panels are locked together, meet in a common plane that is at an angle of 30° to 70° with respect to the plane of the joined panels. (*Id.* at 13.)

Unilin states Alloc’s construction ignores the plain language of the claim 1 which explicitly states that it is the common plane of tangency, and not the plane of the contact surfaces, that is inclined at an angle other than 90°. (Unilin Reply 4.)

The question presented does not involve a “term” explicitly stated in a patent claim; rather, it is a geometric relationship described in claims, upon which the parties disagree. The disputed “relationship” appears in claim 1 of the ‘486 patent as follows: “configured, when engaged in a cooperative relationship **upon coupling in a common plane of two identical ones of said panel, to meet each other at a common plane of tangency that with respect to the lower lip is inclined at an angle other than 90° relative to the common plane of the coupled panels**, said angle extending inwardly and downward from a distally outer location to a proximal inner location.” (‘486 patent, 14:19-26) (emphasis added.) The “relationship” appears in claim 65 as follows: “configured, when engaged in a

cooperative relationship **upon coupling in a common plane of two identical ones of said panel, to meet each other at a common plane that, with respect to the lower lip, is inclined at an angle of 30° to 70° relative to the common plane of the coupled panels**, said angle extending inwardly and downward from a distally outer location to a proximal inner location” (‘486 patent, 20:9-17) (emphasis added.)

The language in claims 1 and 65 is similar, but not identical. Claim 1 refers to “a common plane of tangency.” Therefore, a plain reading of the claim, supports Unilin’s proposed construction of geometric relationship as referring to the angle other than 90° between the common plane of tangency and the common plane formed by the connected panels.

Unlike claim 1, claim 65 contains no mention of a common plane of tangency.¹⁴ Claim 65 simply refers to a common plane. Unlike claim 1, claim 65 also contains commas setting off the clause, “with respect to the lower lip.” Thus, the Court construes claim 65 as refers to the common plane of the coupled panels, that with respect to the lower lip, is inclined at the angle of 30° to 70° relative to the coupled panels.

Therefore, the Court concludes that “angle of the common plane of the coupled panels” in claim 1 of the ‘486 patent refers to the angle of the common plane of the coupled panels with the common plane of tangency which is other than 90°. The Court further concludes that with respect to claim 65 of the ‘486 patent the “angle of the common plane of

¹⁴These distinctions between claims 1 and 65 were not pointed out by either party.

the coupled panels,” refers to the angle of the coupled panels that, with respect to the lower lip, is inclined at the angle of 30° to 70° relative to the coupled panels.

20. Claim 27

Alloc states that the prosecution history of the ‘836 patent requires that claim 27 of that patent include the limitation of a lower lip that has an elastically bendable portion. (Alloc Initial Mem. 22-23.) Alloc relies upon the Office Action dated June 5, 2001, wherein the examiner stated that application claim 73 (issued as patent claim 23) would be allowable if rewritten as an independent claim. (Jt. Ex. D. 410.)

Alloc cites the examiner’s reasoning for allowance as follows:

In reference to claims 35, 48, 49, 68 and 73-76, the prior art of record fails to teach the use of rotating, inclining or turning of one panel, more specifically by angling the panel at an angle of less than 90 degrees, with respect to one another in order to facilitate the interconnection thereof while maintaining the elastically bendable portion in a bent state thereafter. The closest prior art of record JP 169976 and JP 07300979 both only discloses shifting the panels in a direction towards one another.

(*Id.*) Alloc notes that Unilin submitted the following “Comments:”

With regard to claims 73-76, the Examiner’s reasons are not appropriate as the claims do not contain the elements mentioned by the Examiner as a basis mentioned by the Examiner as forming a basis for allowability. The claims are believed to be allowable because the prior art fails to disclose or teach the recited combination of elements, in particular the combination of rotatability and snap-action for locking the MDF/HDF core panels.

(Id. at 465.)

Alloc cites the “Examiner’s Response to the Applicant’s Comments on the Reasons for Allowable Subject Matter” which states:

In regards to the applicant’s reason for allowance for claims 73-76, the examiner stands by her reason for allowance. However, claim 73 is directed to the “turnability” of the panels and not the “rotatability of the panels.”

(Id. at 486.)

Unilin states that its non-response to the patent examiner’s notice of allowance is of no consequence, and that it did not disavow the scope of claim 27.

Claim 27 of the ‘836 patent states:

A floor covering comprising a laminated hard floor panel having a wood-based core material selected from the group consisting of High Density Fibreboard (HDF) and Medium Density Fibreboard (MDF), said panel comprising a first pair and a second pair of opposed side edges, said panel further comprising generally complementary coupling parts located at both of the pairs of said side edges, said coupling parts comprising a tongue and a groove, said tongue and groove when coupled along adjacent side edges of two ones of said panel comprising integral mechanical locking elements, said coupling parts as well as said mechanical locking elements being integral and made in one piece with said core material, said coupling parts together with said locking elements arranged so as to enable a locking in a direction perpendicular to the plane of the floor covering as well as in a direction perpendicular to the coupled side edges and parallel to a plane including the panels that are coupled,

wherein said coupling parts and the mechanical locking elements of at least said second pair of opposite side edges are configured such that two identical ones of said floor panel are coupled by shifting them laterally towards each other in a substantial planar fashion, and wherein the locking elements of said second pair of opposite side edges provide a snap-together coupling providing a snap-action during the coupling of two panels by shifting them laterally towards each other, said snap action being delivered substantially by said core material;

wherein said coupling parts and locking elements of the first pair of side edges are configured and dimensioned so as to enable two identical ones of said floor panel to be coupled at the side edges at least by turning one of said floor panels relative to the other.

(20:64-67,21:1-25.) Claim 27 does not mention a lower lip that has an elastically bendable portion.

Disclaimers based on disavowing actions or statements during prosecution, however, must be both clear and unmistakable. *Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1378-79 (Fed. Cir. 2005). Moreover, “it is the applicant, not the examiner, who must give up or disclaim subject matter that would otherwise fall within the scope of the claims.”

Id. at 1379 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1124 (Fed.Cir. 2004) and citing *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1273 (Fed. Cir. 2001) (Holding that, unlike the statement of an applicant, the statements of an examiner will not necessarily limit a claim)). (*See also*, Unilin's Opp'n, Tab 15 (Manual of Patent Examining Procedure, 1300-1 (8th ed. Rev. 2 2004)).

Under the circumstances, Unilin responded once to the examiner that it did not agree with her reasoning because the claims did not include the cited features. The examiner rejected Unilin's contention, but did not supply any additional reasoning upon which Unilin could further comment, except to say that it still disagreed. The Court does not find a clear and unmistakable disclaimer based on the fact that Unilin did not reiterate its disagreement with the examiner. Thus, the Court does not find that claim 27 of the '836 patent includes the limitation of a lower lip that has an elastically bendable portion.

Summary

As requested by the parties, the Court has construed certain claim terms. The following order summarizes the Court's construction of the disputed claim terms and related issues. For reference purposes, the Court has included a table of the disputed terms following its order.

The issuance of this claim construction decision triggers the framework of dates set by the Court's March 14, 2006, revised scheduling order. This order sets specific dates to govern this action, including final pretrial and trial dates. The Court has reserved three weeks for the trial of this action, based on the estimate initially provided by the parties. If that estimate needs adjustment or if other problems are currently presented by the schedule below the parties should notify the Court in writing by March 30, 2007.

**NOW, THEREFORE, BASED ON THE FOREGOING, IT IS HEREBY
ORDERED THAT:**

The following terms in the '486 and '836 patents are construed as follows:

1. **“COMPLEMENTARY COUPLING PART”** means “a completing component that cooperates with another completing component to connect two panels together in the vertical and horizontal directions.”

2. **“TONGUE”** means “a protrusion extending distally from a side spaced inwardly from the top and bottom surfaces.”

3. **“LOCKING ELEMENT”** means “a portion of a coupling part having the structure as recited in the claim that allows for engagement and fastening.”

4. **“LOCKING MEANS,”** as used in claims 7 and 52 of the ‘486 patent, shall be replaced by “locking element.”

5. **“CONTACT SURFACES”-“SUBSTANTIAL SEPARATION”** means “a surface on a locking element that comes into contact with a corresponding surface on an opposing locking element that prevents a significantly large separation.”

6. **“RECESS”** means “an indentation or small hollow.”

7. **“SIDE WALL OF SIDE RECESS”** means “a side wall of the recess that slopes downwardly and inwardly.” (AGREED).

8. **“COMMON PLANE OF TANGENCY”** means “a plane that is tangent to a contact surface of the lower lip at a point of contact with a contact surface of the tongue.”

9. **“FREE FROM PLAY”** means “there are no spaces between the contact surfaces so that the panels are locked in the horizontal and vertical directions.”

10. **“IDENTICAL”** means “the same.” Such definition does not rule out minor machining variations.

11. “**BIASING FORCE**” means “force acting within a joint that urges the panels together after coupling.” (AGREED).

12. “**ELASTICALLY BENDABLE PORTION**” means “a resilient portion of a coupling part.”

13. “**SNAP-TOGETHER COUPLING - SNAP ACTION SHIFTING THEM LATERALLY**” means “a device that serves to connect the ends of adjacent parts or objects by snap-action, which is characterized by a rapid resilient movement towards a geometry, immediately precipitated by the reduction of a resisting force, when the panels are joined by shifting them laterally in a substantially co-planar fashion.” (AGREED).

14. “**SNAP-TYPE ELEMENTS**” are “elements that are capable of exhibiting snap action.”

15. “**LATERALLY SLIDING AND SNAPPING THE COOPERATIVE COUPLING PARTS TOGETHER**” means “the panels are joined by moving them towards each other in substantially a common plane and coupled via a snap action.” (AGREED).

16. “**AT LEAST ONE OF THE SIDE EDGE OF BOTH PAIRS OF THE SIDE EDGES**” requires “that only one of the two grooves previously identified in the claim needs to have an upper lip above the groove.”

17. “**COUPLING IN A COMMON PLANE**” describes the position of the panels in relation to each other after they are coupled.

18. “**A RECESS LOCATED IN A LOWER LIP EXTENDING TO A SIDE EDGE AND DEFINING AT LEAST IN PART A LOWER SIDE OF SAID**

GROOVE" means "it is the lower lip that must extend to a side edge and define at least in part a lower side of the groove."

19. a. **"ANGLE OF THE COMMON PLANE OF THE COUPLED PANELS"** in claim 1 of the '486 patent refers to the angle of the common plane of the coupled panels with the common plane of tangency which is other than 90°.

b. **"ANGLE OF THE COMMON PLANE OF THE COUPLED PANELS"** in claim 65 of the '486 patent refers to the angle of the coupled panels that, with respect to the lower lip, is inclined at the angle of 30° to 70° relative to the coupled panels.

20. **CLAIM 27 OF THE '836 PATENT does not include** the limitation of a lower lip that has an elastically bendable portion.

The parties **SHALL** exchange expert reports on issues for which they bear the burden of proof on or before **April 2, 2007**;

The parties **SHALL** exchange responsive expert reports on or before **April 23, 2007**;

Dispositive motions **SHALL** be filed on or before **June 4, 2007**. Opposition and reply briefs **SHALL** be filed in accordance with Civil L.R. 7.1 (E.D. Wis.);

Pursuant to Civil L.R. 16.3, each party **SHALL** serve and **FILE** a final pretrial report. Reports are due three days before the final pretrial conference. The report must be signed by the attorney (or a party personally, if not represented by counsel) who will try the case. Sanctions, which may include the dismissal of claims and defenses, may be imposed if a trial report is not filed.

The report must include the following:

1. A short summary statement of the facts of the case and theories of liability or defense. The statement may not be longer than two pages.
2. A statement of the issues.
3. The names and addresses of all witnesses expected to testify. A witness not listed will not be permitted to testify absent a showing of good cause.
4. If expert witnesses are to be used, a narrative statement of the experts' background.
5. A list of exhibits to be offered at trial, sequentially numbered according to General L.R. 26.1.
6. A designation of all depositions or portions of transcripts or other recordings of depositions to be read into the record or played at trial as substantive evidence. Reading or playing more than five pages from a deposition will not be permitted unless the Court finds good cause.
7. Counsel's best estimate on the time needed to try the case.
8. If scheduled for a jury trial:
 - a. All proposed questions that counsel would like the Court to ask on voir dire.
 - b. Proposed instructions on substantive issues.
 - c. A proposed verdict form.

9. If scheduled for a court trial, proposed findings of fact and conclusions of law. (See Fed. R. Civ. P. 52).

In addition to completing a report, counsel are expected to confer and make a good faith effort to settle the case. Counsel are also expected to arrive at stipulations that will save time during the trial;

The parties **SHALL PARTICIPATE** in a telephonic final pretrial conference conducted by the Court on **January 7, 2008, at 2:00 p.m (CST)**. The Court will initiate the call;

Any motions in limine **SHALL** be filed on or before **January 2, 2008**. Any responses to any motions in limine **SHALL** be filed on or before **January 11, 2008**. Any replies thereto **SHALL** be filed on or before **January 16, 2008**;

The jury trial of this matter **SHALL** commence on **January 28, 2008, at 9:00 a.m.** Three weeks have been reserved for the trial of this matter; and,

If the estimated length of the jury trial needs adjustment or if other problems are currently presented by this schedule, the parties **SHALL** notify the Court in writing by **March 30, 2007**.

Dated at Milwaukee, Wisconsin, this 6th day of March, 2007.

BY THE COURT:

s/Rudolph T. Randa
HON. RUDOLPH T. RANDA
Chief Judge